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EXAMINER

HUNTSINGER, PETER K

ART UNIT PAPER NUMBER

2624

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/922,521	Applicant(s) JERAN ET AL.	
	Examiner Peter K. Huntsinger	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-18 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/05 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-9, 11-18, and 28-31 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments with respect to claims 20-27 have been fully considered but they are not persuasive.

The applicant argues with respect to claims 20, 21, 26, and 27 in essence that: **Brot et al. do not disclose updating the print characteristics if the print characteristics are compatible with the capabilities of the printer.**

- a. Brot et al. disclose storing an identification of the type of printer and utilizing the identification data to select the characteristics to update (col. 3, lines 20-24).

The applicant argues with respect to claims 22-25 in essence that:

The data in Brot et al. is transferred based upon a type of ribbon cartridge and not the printing capabilities of the printer itself.

b. The type of cartridge is a capability of the printer. The printer is either capable of printing utilizing a ribbon or laser.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Brot et al. U.S. Patent 6,522,348.

Referring to claim 22, Brot et al. disclose a flexible printing system comprising: a printer comprising: memory that stores updateable printing characteristics (col. 2, lines 43-50); and a print characteristics transfer mechanism (col. 2, lines 57-61); a network connection that enables the printer to access a network (col. 2-3, lines 62-67, 1-5); and a printer data memory that stores a uniform resource locator, the printer data memory coupled to the print characteristics transfer mechanism in order to transfer the uniform resource locator to the printer (col. 2-3, lines 62-67, 1-5), wherein the printer is

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configured to download data from a web site corresponding to the URL if the data is compatible with printing capabilities of printer (col. 2-3, lines 66-67, 1-11). The call number of the server as disclosed by Brot et al., which serves as an address, reads on the claimed universal resource locator.

Referring to claim 23, Brot et al. disclose the system of claim 22 wherein the network connection comprises a modem that is coupled to the public switched telephone network (col. 2-3, lines 62-67, 1-5).

Referring to claim 24, Brot et al. disclose the system of claim 22 wherein the network connection comprises a computer having Internet access capabilities (col. 2-3, lines 62-67, 1-5).

Referring to claim 25, Brot et al. disclose the system of claim 22 wherein the network is the Internet (col. 2-3, lines 62-67, 1-5).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4, 7, 9, 20, 26, 28, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, and Brot et al. Patent 6,522,348.

Referring to claim 1, Hirst et al. disclose a flexible printing system comprising: a printer comprising memory that stores a set of updateable print characteristics (electrographic printing parameters, col. 2, lines 45-54) and a print characteristics transfer mechanism (EEPROM 19 of Fig. 1 and 33 of Fig. 3, col. 5, lines 43-48); and a printer consumable comprising memory that stores a set of print characteristics (col. 4, lines 45-49), the printer consumable coupled to the print characteristics transfer mechanism in order to update the set of updateable print characteristics in the printer memory (col. 5, lines 54-57). Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Hirst et al. do not disclose expressly updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to only upgrade characteristics that

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desired or necessary for the printer. Therefore, it would have been obvious to combine Bullock et al. and Brot et al. with Hirst et al. to obtain the invention as specified in claim 1.

Referring to claim 4, Hirst et al. disclose the system of claim 1 wherein the memory comprises semiconductor memory and the transfer mechanism comprises electrical contacts that transfer electrical signals from the memory to the printer (col. 2, lines 55-65).

Referring to claim 7, Hirst et al. disclose the system of claim 1 wherein the updateable print characteristics are replaced by the print characteristics stored in the print consumable memory (col. 2, lines 43-49). The updates and color lookup tables disclosed by Hirst et al. read on the claimed printer characteristics.

Referring to claim 9, Hirst et al. disclose the system of claim 1 wherein the updateable characteristics include color tables (col. 2, lines 43-49).

Referring to claim 20, Hirst et al. disclose the method comprising the steps of; the printer reading the second set of printing characteristics (1. of Fig. 5); if the second set of printing characteristics are different from the first set of printing characteristics, the printer retrieving the second set of printing characteristics (1. of Fig. 5); and updating the first set of printing characteristics with the second set of printing characteristics (col. 2, lines 43-49). Hirst et al. do not disclose expressly utilizing a data card with printer characteristics and updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose a data card with print characteristics (col. 2, lines 10-16); coupling the data card to the card reader (col. 2, lines 57-61); and

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updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to transfer information using a data card and to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to provide the convenience of the widely used data card system used in most digital cameras and to only upgrade characteristics that desired or necessary for the printer. Further, the data card is well known in the art and simply a generic type of storage and transfer medium. Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Therefore, it would have been obvious to obtain the invention as specified in claim 20.

Referring to claim 26, Hirst et al. disclose the method comprising the steps of; if the second set of printing characteristics is different from the first set of printing characteristics and the printer is capable of using the second set of printing characteristics, the printer retrieving the second set of printing characteristics (1. of Fig.

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5); and updating the first set of printing characteristics in response to the second set of printing characteristics (col. 2, lines 43-49). Hirst et al. do not disclose expressly a data card that stores network identification of a location on a network and updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose coupling the data card to the card reader (col. 2, lines 57-61); the printer reading the network identification from the data card (col. 2-3, lines 62-67, 1-5); accessing the network identification over the network (col. 3, lines 5-8); accessing a second set of printing characteristics at the network location designated by the network identification (col. 3, lines 9-12); and updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to transfer information using a network location stored on a data card and to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to provide the convenience of the widely used data card system used in most digital cameras and to only upgrade characteristics that desired or necessary for the printer. Further, the data card is well known in the art and simply a generic type of storage and transfer medium. Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At

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the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Therefore, it would have been obvious to obtain the invention as specified in claim 26.

Referring to claim 28, Hirst et al. disclose a printer cartridge apparatus having a capability for printing on media and updating printing characteristics of a printer, the apparatus comprising: memory that stores printing characteristics for use by the printer (EEPROM 19 of Fig. 1 and 33 of Fig. 3, col. 5, lines 43-48); means for transferring the printing characteristics to the printer, the means coupled to the memory (col. 2, lines 37-49); and means for printing on the media (image forming device 10 of Fig.1, col. 4, lines 24-28). . Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Hirst et al. do not disclose expressly updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field

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of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to only upgrade characteristics that desired or necessary for the printer. Therefore, it would have been obvious to combine Bullock et al. and Brot et al. with Hirst et al. to obtain the invention as specified in claim 28.

Referring to claim 31, Hirst et al. disclose the apparatus of claim 28 wherein the printing characteristics include a color table (col. 2, lines 43-49).

8. Claims 2, 12-15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, and Brot et al. Patent 6,522,348 as applied to claim 1 above, and further in view of Wheeler et al. Patent 6,467,888.

Referring to claim 2, Hirst et al. disclose semiconductor memory but do not disclose expressly using a radio frequency transfer mechanism. Wheeler et al. disclose the transfer mechanism comprises a radio frequency receiver that transfers the set of print characteristics from the memory over a radio frequency link (col. 13, lines 50-67). Hirst et al. and Wheeler et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to transfer information using radio frequency as disclosed by Wheeler et al. The motivation for doing so would have been to allow the printer memory and the consumable memory to

transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Therefore, it would have been obvious to combine Wheeler et al. with Hirst et al. to obtain the invention as specified in claim 2.

Referring to claim 12, Hirst et al. disclose a flexible printing system comprising: a printer comprising programmable memory that stores updateable print characteristics (electrographic printing parameters, col. 2, lines 45-54) (EEPROM 19 of Fig. 1 and 33 of Fig. 3, col. 5, lines 43-48); and a printer consumable comprising memory that stores a set of printer characteristics (col. 4, lines 45-49). Hirst et al. does not disclose expressly using a radio receiver or transmitter. Wheeler et al. disclose a radio frequency receiver and a radio frequency transmitter that transmits the printer characteristics to the radio frequency receiver (col. 8-9, lines 60-67, 1-3). Hirst et al. and Wheeler et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to transfer information using radio frequency as disclosed by Wheeler et al. The motivation for doing so would have been to allow the printer memory and the consumable memory to transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the

invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Hirst et al. do not disclose expressly updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to only upgrade characteristics that desired or necessary for the printer. Therefore, it would have been obvious to obtain the invention as specified in claim 12.

Referring to claim 13, Hirst et al. disclose the method comprising the steps of: the printer querying the printer data memory (1. of Fig. 5); when the printer data memory responds, the printer retrieving the second set of printing characteristics from the printer data memory (1. of Fig. 5); and updating the printer with the second set of printing characteristics (col. 2, lines 43-49). Hirst et al. does not disclose expressly using radio frequency identification. Wheeler et al. disclose transmitting print characteristics over a radio frequency link (col. 3, lines 54-60). Hirst et al. and Wheeler et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the

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printing system of Hirst et al. to transfer information using radio frequency as disclosed by Wheeler et al. The motivation for doing so would have been to allow the printer memory and the consumable memory to transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Hirst et al. do not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Hirst et al. and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to include finishing process characteristics. The motivation for doing so would have been to easily provide the information needed to direct the finishing process to the printer. Hirst et al. do not disclose expressly updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to only upgrade characteristics that desired or necessary for the printer. Therefore, it would have been obvious to obtain the invention as specified in claim 13.

Referring to claim 14, Hirst et al. disclose if the first set and the second set of printing characteristics are substantially equivalent, the printer using the first set of

printing characteristics (col. 5, lines 57-62). Hirst et al. disclose that the printing characteristics are updated only when an alternative is available different from the original instructions.

Referring to claim 15, Wheeler et al. disclose if the second set of printing characteristics is incompatible with capabilities of the printer, the printer using the first set of printing characteristics (Step 520 of Fig. 14, col. 21, lines 48-61). The method of Wheeler et al. takes no action with the characteristics when incompatible ink is inserted. Since the first set of printing characteristics were designated before the incompatible ink was inserted, the first set of characteristics would still be used.

Referring to claim 17, Hirst et al. disclose the first and second sets of printing characteristics comprise a color table (col. 2, lines 43-49).

9. Claims 3, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, and Brot et al. Patent 6,522,348 as applied to claims 1 and above, and further in view of Arthur et al. Patent 5,049,898.

Referring to claim 3, Hirst et al. disclose printer consumable memory but do not disclose expressly optical memory. Arthur et al. disclose the memory comprises optical memory and the transfer mechanism comprises a laser for reading the optical memory (col. 3, lines 4-9). Hirst et al. and Arthur et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst

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et al. to read optical memory. The motivation for doing so would have been the lower cost of using optical memory. Further, optical memory is well known in the art and a common way to encode data. Therefore, it would have been obvious to combine Arthur et al. with Hirst et al. to obtain the invention as specified in claim 3.

Referring to claim 5, Hirst et al. disclose printer consumable memory but do not disclose expressly magnetic memory. Arthur et al. disclose magnetic memory and the transfer mechanism comprises a magnetic data reader for reading the magnetic memory (col. 3, lines 39-45). Hirst et al. and Arthur et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to utilize magnetic memory. The motivation for doing so would have been the stability and versatility of the memory. Further, the magnetic memory is well known in the art and simply a generic type of memory. Therefore, it would have been obvious to combine Arthur et al. with Hirst et al. to obtain the invention as specified in claim 5.

Referring to claim 6, Hirst et al. disclose printer consumable memory but do not disclose expressly magnetic memory. Arthur et al. disclose a bar code and the transfer mechanism comprises a laser scanner that scans the bar code and transfers the scanned data to the printer (col. 6, lines 34-38). Hirst et al. and Arthur et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to read bar codes. The motivation for

doing so would have been the lower cost of printing bar codes. Further, bar codes are well known in the art and a common way to encode data. Therefore, it would have been obvious to combine Arthur et al. with Hirst et al. to obtain the invention as specified in claim 6.

10. Claims 8, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, and Brot et al. Patent 6,522,348 as applied to claims 1 and 28 above, and further in view of Emmett et al. Patent 4,829,326.

Referring to claim 8, Hirst et al. disclose a set of updateable print characteristics (col. 2, lines 43-49), but do not disclose expressly a dithering algorithm characteristic. Emmett et al. disclose a dithering algorithm (col. 13, lines 24-30). Hirst et al. and Emmett et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update a dithering algorithm because a dithering algorithm is a common characteristic in printers. A dithering algorithm is used to approximate a color from a mixture of other colors when the required color is not available. The motivation for doing so would have been, because most printers exclusively use only 3 primary colors and black ink, to provide the different color tones. Therefore, it would have been obvious to obtain the invention as specified in claim 8.

Referring to claim 29, Hirst et al. disclose Hirst et al. disclose a color table printing characteristic (col. 2, lines 43-49), but do not disclose expressly a dithering

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algorithm characteristic. Emmett et al. disclose a dithering algorithm (col. 13, lines 24-30). Hirst et al. and Emmett et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update a dithering algorithm because a dithering algorithm is a common characteristic in printers. A dithering algorithm is used to approximate a color from a mixture of other colors when the required color is not available. The motivation for doing so would have been, because most printers exclusively use only 3 primary colors and black ink, to provide the different color tones. Therefore, it would have been obvious to obtain the invention as specified in claim 29.

Referring to claim 30, Hirst et al. disclose Hirst et al. disclose a set of updateable print characteristics (col. 2, lines 43-49), but do not disclose expressly a dithering algorithm characteristic. Emmett et al. disclose a dithering algorithm (col. 13, lines 24-30). Hirst et al. and Emmett et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update a dithering algorithm because a dithering algorithm is a common characteristic in printers. A dithering algorithm is used to approximate a color from a mixture of other colors when the required color is not available. The motivation for doing so would have been, because most printers exclusively use only 3 primary colors and black ink, to provide the different color tones. Therefore, it would have been obvious to obtain the invention as specified in claim 30.

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11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, and Brot et al. Patent 6,522,348 as applied to claim 1 above, and further in view of Fotland Patent 6,008,827.

Referring to claim 11, Bullock et al. disclose finishing process characteristics but do not disclose expressly a matte finish, a glossy finish, a satin finish, and finishes with varied surface roughness. Fotland discloses a matte finish, a glossy finish, a satin finish, and finishes with varied surface roughness (col. 5, lines 7-13). Hirst et al. and Fotland are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to utilize different finishes. The motivation for doing so would have been to provide different options for a printed sheet based on individual preference. Further, these are simply generic types of finishes. Therefore, it would have been obvious to combine Fotland with Hirst et al. to obtain the invention as specified in claim 11.

12. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553, Bullock et al. Patent 5,835,817, Brot et al. Patent 6,522,348, and Wheeler et al. Patent 6,467,888 as applied to claim 13 above, and further in view of Emmett et al. Patent 4,829,326.

Referring to claim 16, Hirst et al. disclose the second set of printing characteristics comprises a color table (col. 2, lines 43-49) but do not disclose expressly a dithering algorithm characteristic. Emmett et al. disclose a dithering algorithm (col. 13, lines 24-30). Hirst et al. and Emmett et al. are combinable because they are from

the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update a dithering algorithm because a dithering algorithm is a common characteristic in printers. A dithering algorithm is used to approximate a color from a mixture of other colors when the required color is not available. The motivation for doing so would have been, because most printers exclusively use only 3 primary colors and black ink, to provide the different color tones. Therefore, it would have been obvious to obtain the invention as specified in claim 16.

Referring to claim 18, Hirst et al. disclose a set of updateable print characteristics (col. 2, lines 43-49) but do not disclose expressly a dithering algorithm characteristic. Emmett et al. disclose a dithering algorithm (col. 13, lines 24-30). Hirst et al. and Emmett et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to update a dithering algorithm because a dithering algorithm is a common characteristic in printers. A dithering algorithm is used to approximate a color from a mixture of other colors when the required color is not available. The motivation for doing so would have been, because most printers exclusively use only 3 primary colors and black ink, to provide the different color tones. Therefore, it would have been obvious to obtain the invention as specified in claim 18.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553 and Brot et al. Patent 6,522,348.

Referring to claim 21, Hirst et al. disclose the method comprising the steps of; the printer reading the second set of printing characteristics (1. of Fig. 5); if the second set of printing characteristics are different from the first set of printing characteristics and the printer is capable of using the printing characteristics (1. of Fig. 5), the printer retrieving the second set of printing characteristics (1. of Fig. 5); and updating the first set of printing characteristics with the second set of printing characteristics (col. 2, lines 43-49).. Hirst et al. do not disclose expressly utilizing a data card with printer characteristics and updating the characteristics if they are compatible with the capabilities of the printer. Brot et al. disclose a data card with print characteristics (col. 2, lines 10-16); coupling the data card to the card reader (col. 2, lines 57-61); and updating the print characteristics if the print characteristics are compatible with the print capabilities of the printer (co. 3, lines 20-24). Hirst et al. and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Hirst et al. to transfer information using a data card and to update print characteristics if the characteristics are compatible with the printer. The motivation for doing so would have been to provide the convenience of the widely used data card system used in most digital cameras and to only upgrade characteristics that desired or necessary for the printer. Further, the data card is well known in the art and simply a generic type of storage and transfer medium. Therefore, it would have been obvious to obtain the invention as specified in claim 21.

14. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirst et al. Patent 5,930,553 Brot et al. Patent 6,522,348, and Bullock et al. Patent 5,835,817 as applied to claim 26 above, and further in view of Sasaki et al. Patent 6,351,317.

Referring to claim 27, Brot et al. disclose the step of accessing the uniform resource locator over the Internet but do not disclose expressly accessing the uniform resource locator through a computer coupled to the printer. Sasaki et al. disclose a printer capable of accessing the internet through a computer coupled to a printer (col. 14, lines 30-47). Hirst et al. and Sasaki et al. are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize a computer for accessing the internet with a printer. The motivation for doing so would have been to eliminate the need for the printer to require a modem or internet connecting means and utilize the modem of the computer. Therefore, it would be obvious to obtain the invention as specified in claim 27.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571)272-7471. The fax phone


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number for the organization where this application or proceeding is assigned is 571-273-8300.

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PKH

A handwritten signature in black ink, appearing to be 'PKH' followed by a stylized name.


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER